## SEQUENCE LISTING

<110> WEI, Ming-Hui et al. <120> ISOLATED HUMAN ENZYME PROTEINS, NUCLEIC ACID MOLECULES ENCODING HUMAN ENZYME PROTEINS. AND USES THEREOF <130> CL001201DIV <150> To be Assigned <151> 08-20-2003 <140> 09/820,004 <141> 03-29-2001 <160> 6 <170> FastSEO for Windows Version 4.0 <210> 1 <211> 1606 <212> DNA <213> Human <400> 1 gcgcctgggg accgcagagg tgagagtcgc gcccgggagt ccgccgcctg cgccaggatg 60 gagttcgtga aatgccttgg ccaccccgaa gagttctaca acctggtgcg cttccggatc 120 gggggcaagc ggaaggtgat gcccaagatg gaccaggact cgctcagcag cagcctgaaa 180 acttgctaca agtatctcaa tcagaccagt cgcagtttcg cagctgttat ccaggcgctg 240 gatggggaaa tgcgcaacgc agtqtqcata ttttatctqq ttctccqaqc tctqqacaca 300 ctggaagatg acatgaccat cagtgtggaa aagaaggtcc cgctgttaca caactttcac 360 tettteettt accaaccaga etggeggtte atggagagca aggagaagga tegecaggtg 420 ctggaggact tcccaacgta ctgccactat gttgctgggc tggtcggaat tggcctttcc 480 cgtcttttct cagcctcaga gtttgaagac cccttagttg gtgaagatac agaacgtgcc 540 aactctatgg gcctgtttct gcagaaaaca aacatcatcc gtgactatct ggaagaccag 600 caaggaggaa gagagttctg gcctcaagag gtttggagca ggtatgttaa gaagttaggg 660 gattttgcta agccggagaa tattgacttg gccgtgcagt gcctgaatga acttataacc 720 aatgcactgc accacatccc agatgtcatc acctaccttt cqaqactcaq aaaccaqaqt 780 gtgtttaact tctgtgctat tccacaggtg atggccattg ccactttggc tgcctgttat 840 aataaccagc aggtgttcaa aggggcagtg aagattcgga aagggcaagc agtgaccctc 900 atgatggatg ccaccaatat gccagctgtc aaagccatca tatatcagta tatggaagag 960 atttatcata gaatccccga ctcagaccca tcttctagca aaacaaggca gatcatctcc 1020 accatccgga cgcagaatct tcccaactgt cagctgattt cccgaagcca ctactccccc 1080 atctacctgt cgtttgtcat gcttttggct gccctgagct ggcagtacct gaccactctc 1140 tcccaggtaa cagaagacta tgttcagact ggagaacact gatcccaaat ttgtccataq 1200 ctgaagtcca ccataaagtg gatttacttt ttttctttaa ggatggatgt tgtqttctct 1260 ttattttttt cctactactt taatccctaa aagaacgctg tgtggctggg acctttagga 1320 aagtgaaatg caggtgagaa gaacctaaac atgaaaqgaa aggqtqcctc atcccaqcaa 1380 cctgtccttg tgggtgatga tcactgtgct gcttgcggct catggcagag cattcagtgc 1440 cacggtttag gtgaagtcgc tgcatatgtg actgtcatga gatcctactt agtatgatcc 1500 1606

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<sup>&</sup>lt;211> 417

<sup>&</sup>lt;212> PRT

<sup>&</sup>lt;213> Human

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Val Arg Phe Arg Ile Gly Gly Lys Arg Lys Val Met Pro Lys Met Asp
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Gln Thr Ser Arg Ser Phe Ala Ala Val Ile Gln Ala Leu Asp Gly Glu
Met Arg Asn Ala Val Cys Ile Phe Tyr Leu Val Leu Arg Ala Leu Asp
Thr Leu Glu Asp Asp Met Thr Ile Ser Val Glu Lys Lys Val Pro Leu
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Leu His Asn Phe His Ser Phe Leu Tyr Gln Pro Asp Trp Arg Phe Met
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Glu Ser Lys Glu Lys Asp Arg Gln Val Leu Glu Asp Phe Pro Thr Ile
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Ser Leu Glu Phe Arg Asn Leu Ala Glu Lys Tyr Gln Thr Val Ile Ala
                        135
                                            140
Asp Ile Cys Arg Arg Met Gly Ile Gly Met Ala Glu Phe Leu Asp Lys
                                        155
His Val Thr Ser Glu Gln Glu Trp Asp Lys Tyr Cys His Tyr Val Ala
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Gly Leu Val Gly Ile Gly Leu Ser Arg Leu Phe Ser Ala Ser Glu Phe
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Glu Asp Pro Leu Val Gly Glu Asp Thr Glu Arg Ala Asn Ser Met Gly
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Leu Phe Leu Gln Lys Thr Asn Ile Ile Arg Asp Tyr Leu Glu Asp Gln
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Lys Lys Leu Gly Asp Phe Ala Lys Pro Glu Asn Ile Asp Leu Ala Val
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Gln Cys Leu Asn Glu Leu Ile Thr Asn Ala Leu His His Ile Pro Asp
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Val Ile Thr Tyr Leu Ser Arg Leu Arg Asn Gln Ser Val Phe Asn Phe
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Cys Ala Ile Pro Gln Val Met Ala Ile Ala Thr Leu Ala Ala Cys Tyr
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Asn Asn Gln Gln Val Phe Lys Gly Ala Val Lys Ile Arg Lys Gly Gln
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                                        315
Ala Val Thr Leu Met Met Asp Ala Thr Asn Met Pro Ala Val Lys Ala
                                    330
Ile Ile Tyr Gln Tyr Met Glu Glu Ile Tyr His Arg Ile Pro Asp Ser
            340
                                345
Asp Pro Ser Ser Lys Thr Arg Gln Ile Ile Ser Thr Ile Arg Thr
                            360
                                                365
Gln Asn Leu Pro Asn Cys Gln Leu Ile Ser Arg Ser His Tyr Ser Pro
                        375
                                            380
Ile Tyr Leu Ser Phe Val Met Leu Leu Ala Ala Leu Ser Trp Gln Tyr
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                                        395
Leu Thr Thr Leu Ser Gln Val Thr Glu Asp Tyr Val Gln Thr Gly Glu
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                                    410
His
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<213> Human
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Val Arg Phe Arg Ile Gly Gly Lys Arg Lys Val Met Pro Lys Met Asp
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Gln Asp Ser Leu Ser Ser Leu Lys Thr Cys Tyr Lys Tyr Leu Asn
                           40
Gln Thr Ser Arg Ser Phe Ala Ala Val Ile Gln Ala Leu Asp Gly Glu
                       55
Met Arg Asn Ala Val Cys Ile Phe Tyr Leu Val Leu Arg Ala Leu Asp
                   70
Thr Leu Glu Asp Asp Met Thr Ile Ser Val Glu Lys Lys Val Pro Leu
               85
                                    90
Leu His Asn Phe His Ser Phe Leu Tyr Gln Pro Asp Trp Arg Phe Met
           100
                               105
Glu Ser Lys Glu Lys Asp Arg Gln Val Leu Glu Asp Phe Pro Thr Ile
                           120
                                                125
Ser Leu Glu Phe Arg Asn Leu Ala Glu Lys Tyr Gln Thr Val Ile Ala
Asp Ile Cys Arg Arg Met Gly Ile Gly Met Ala Glu Phe Leu Asp Lys
                   150
                                       155
His Val Thr Ser Glu Gln Glu Trp Asp Lys Tyr Cys His Tyr Val Ala
                                   170
Gly Leu Val Gly Ile Gly Leu Ser Arg Leu Phe Ser Ala Ser Glu Phe
           180
                                185
Glu Asp Pro Leu Val Gly Glu Asp Thr Glu Arg Ala Asn Ser Met Gly
                           200
                                                205
Leu Phe Leu Gln Lys Thr Asn Ile Ile Arg Asp Tyr Leu Glu Asp Gln
                       215
                                           220
Gln Gly Gly Arg Glu Phe Trp Pro Gln Glu Val Trp Ser Arg Tyr Val
                                        235
Lys Lys Leu Gly Asp Phe Ala Lys Pro Glu Asn Ile Asp Leu Ala Val
               245
                                    250
Gln Cys Leu Asn Glu Leu Ile Thr Asn Ala Leu His His Ile Pro Asp
                                265
Val Ile Thr Tyr Leu Ser Arg Leu Arg Asn Gln Ser Val Phe Asn Phe
                            280
Cys Ala Ile Pro Gln Val Met Ala Ile Ala Thr Leu Ala Ala Cys Tyr
                       295
Asn Asn Gln Gln Val Phe Lys Gly Ala Val Lys Ile Arg Lys Gly Gln
                   310
                                        315
Ala Val Thr Leu Met Met Asp Ala Thr Asn Met Pro Ala Val Lys Ala
               325
                                    330
Ile Ile Tyr Gln Tyr Met Glu Glu Ile Tyr His Arg Ile Pro Asp Ser
                               345
Asp Pro Ser Ser Ser Lys Thr Arg Gln Ile Ile Ser Thr Ile Arg Thr
                           360
Gln Asn Leu Pro Asn Cys Gln Leu Ile Ser Arg Ser His Tyr Ser Pro
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Ile Tyr Leu Ser Phe Val Met Leu Leu Ala Ala Leu Ser Trp Gln Tyr
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